ORIGINAL ARTICLES

Why do patients not keep their appointments? Prospective study in a gastroenterology outpatient clinic

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SUMMARY

Unkept outpatient appointments are a drain on resources. In a prospective study we asked non-attenders at a gastroenterology clinic why they had missed their appointment.

103 patients missed their appointment (14% of the total invited); 3 had died. The remaining 100 were asked to complete questionnaires, 68 by mail (43 returned) and 32 by telephone (30 successful); the response rate was thus 73%. 49 of the respondents were new patients, 6 of them with urgent referrals. The explanations for non-attendance by the 73 patients were: forgot to attend or to cancel (30%); no reason (26%); clerical errors (10%); felt better (8%), fearful of being seen by junior doctor (3%); inpatient in another hospital (3%); miscellaneous other (20%). 13 (27%) of the review patients had not kept one or more previous appointments. The non-attendance rates for different clinics ranged from 10% to 25% (average 14%).

A substantial number of non-attenders claimed to have forgotten their appointment or to cancel it. If, as we surmise, this reflects apathy, no strategy to improve attendance is likely to have great impact. Since the non-attendance rate is reasonably constant, it can be taken into account when patients are booked.

INTRODUCTION

Non-attendance at outpatient clinics is a drain on National Health Service resources for several reasons. The first is economic; the cost of each missed appointment in 1997 was estimated at £65[1]. In England alone, in the year 1994–95, about 14 million patients were seen at hospital outpatient clinics[2]. With the national rate of non-attendance at around 12%[3], the estimated total cost of missed appointments is £300 million per year[3]. The second issue is manpower[4]. Patients' failure to attend increases the time others must wait to see a hospital specialist. Non-attendance means under-utilization of equipment and manpower. The third issue is patient health. A delay in presentation and therefore diagnosis, or haphazard monitoring of chronic conditions, will predispose to avoidable ill health[5,6].

6 million appointments were missed in the UK in the period 1996–97. Non-attendance affects all specialties—medicine, surgery, general practice, dentistry[7–10]. Most investigations of causal factors have had low response rates (30–40%)[1,11,12] and are difficult to interpret. In the current study we obtained a response rate of 73%.

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METHODS

The study was undertaken in a gastroenterology clinic, at a university-affiliated Belfast teaching hospital serving a mainly urban population of about 280 000. The clinic saw both review patients and new patients referred mainly from general practitioners by letter. Having read the letter, the consultant decides on the urgency, and the hospital appointments office then sends the patient an appointment. Twenty-seven consecutive clinics were monitored for seven months. Non-attenders were contacted either by letter or by telephone and invited to complete a questionnaire. It was made clear that the answers would be treated in strict confidence and would in no way influence their further management.

The following were recorded: patient's reason for referral; whether the patient had failed to attend before; and whether the patient was a new or follow-up patient. The patient was asked why he or she had not kept the appointment, the options being forgot to attend or cancel, feeling better/symptoms gone, unnecessary appointment, wanted second opinion, or other. Two follow-up questions were asked 'do you plan to re-attend the clinic?' and 'have you ever not attended a clinic before?'

RESULTS

Of 736 booked patients, 103 (14%) did not attend. 3 had died and were excluded. This left 100 study patients. 68 questionnaires were posted, of which 43 were returned and

Table 1 **'Miscellaneous' reasons for non-attendance**

Reason	*No.*
Patient referred to two hospitals by GP	2
Unhappy with inpatient treatment	1
Denies ever attending hospital	1
Employer refused to give time off	1
Bereavement in family	1
Patient claims did attend	2
Transferred to another specialist	1
Told not to come unless scan/investigation had been done	3
Left clinic before being seen	1
Seen as an inpatient, therefore felt did not need to attend	1

25 were not answered. Of the 32 contacted by telephone, 30 responded. The total response rate was thus 73%. The rate of non-attendance ranged from 10% to 25% per clinic with an average of 14%.

The mean age of patients was 49 years (range 14–85), 46% male. 49 were new, of whom 6 were urgent referrals. Of the 51 review patients, 12 (25%) had failed to attend on one previous occasion and 2 twice before. 45% of respondents stated they would attend if given another appointment, 20% that they would not. Explanations for non-attendance were: forgot to attend or cancel appointment (30%), no reason (26%), clerical errors (10%), feeling better (8%), fearful of junior medical staff (3%), inpatient at the time in another hospital (3%), other (20%, Table 1). 27 patients had missed other appointments, 2 of them more than twice before.

Of the patients who said they had forgotten their appointment, some gave reasons—illness (6), change of job and location (2), on holiday (1).

Table 2 indicates diagnoses of non-attenders.

DISCUSSION

According to the Department of Health, during the period 1996–97 the average non-attendance rate at outpatient clinics was 12%, so our 14% is not exceptional. The proportion of patients who claimed forgetfulness, 30%, is comparable to that seen in other specialties such as dermatology and paediatrics[13,14]. In addition, 8% did not attend since they felt better, and 24% returned their questionnaires but did not give a reason; in this group, perhaps, the reasons were trivial enough either to be forgotten or to be an embarrassment. We surmise that a fundamental cause of non-attendance in these groups (30+8+24=62%) was apathy.

Were the answers given by patients truthful? It was made clear to them that their answers would be confidential and would not prejudice their future clinical management. In fact, 3 stated a fear of seeing a junior doctor and one was critical of the inpatient management received.

Non-attendance is not confined to the NHS. Dermatology clinics in the USA recorded a rate of 17% overall. The highest US rates, however, were found in the state-supported categories (26%) while the lowest were in commercial insurance programme schemes (13%). So the risk of non-attendance seems to be related to payer type[15].

How can attendance be improved? Giving the patient a copy of the referral letter has proved ineffective in one study[16]. The use of appointment reminders—letters and telephone calls—reduced non-attendance from 24% to 14%[17]. Although specific targeting of patients who have failed to attend in the past may prove cost-effective, the long-term effectiveness of such reminders is doubtful[18]. The relative success of telephone reminders may partly reflect socioeconomic factors such as having a telephone[19].

A change in the actual appointment system has been suggested by Garton *et al*[20]. They achieved a reduction in non-attendance rates by asking the patients to make their own appointments and confirm their intention to attend these. Their clinic was an osteoporosis screening programme—not a clinic like ours with a mixture of new and review patients—so the applicability may be limited.

Jones and Hedley[11] reported that, when non-attenders completed a questionnaire on why they had failed to attend

Table 2 **Reason for outpatient appointment in non-attenders**

Reason	*No.*
Alcoholic liver disease	3
Altered bowel habit	4
Biliary dysfunction	3
Coeliac disease	1
Deranged liver function tests	8
Dysphagia	1
Epigastric pain	11
General medical problems	11
Hepatitis C	1
Investigation of weight loss	1
Lower abdominal pain	3
Malignancy	2
Microcytic anaemia	2
Nausea	4
Oesophageal dysmotility	2
Pancreatitis	1
Rectal bleeding	6
Reflux symptoms	8
Ulcerative colitis	2
Not given	26

and were asked whether the new appointment was acceptable, their subsequent attendance rates improved. However, since most of these measures require a degree of patient motivation, they are unlikely to have much impact in a clinic such as ours where much of the non-attendance seems to reflect apathy. Furthermore, these interventions require additional secretarial and clerical support with resource implications.

The use of a 'health belief model' to improve attendance rates in patients with chronic conditions has been judged unhelpful; however, one study in patients with systemic lupus erythematosus did show a modest gain[21]. If communication between patient and physician is improved, with a subsequent increase in interest, then there can be a positive effect on attendance[22]. With only 3% of all non-attendance in our study seemingly due to communication difficulties this would have little impact on our group.

Do all the patients called for review actually need to be seen again[23,24]? The question is important, especially since 8% of our group did not attend because they felt well. Are these patients overloading the system, so delaying review for others and increasing the chance they will forget[25]? Bowman *et al*.[26] have shown that shorter waiting times give better attendance rates for first appointments.

Our solution to non-attendances is more pragmatic. Clinics should expect a certain proportion not to attend and 'overbook' to take this into account. In most instances the fluctuations would be manageable. The argument against overbooking is made by Sharp and Hamilton[27]. They feel it might be counterproductive since 100% attendance puts pressure on both patients and staff, and appointment times would be rarely met. In the present climate, value for money and maximum use of resources are prime considerations. This includes staff as well as other resources such as equipment and hospital buildings. Total time spent waiting to be seen is probably the most important factor affecting patient satisfaction. Moreover, if patients are kept informed of the waiting time, satisfaction can be improved[28].

A system of electronic booking of outpatient appointments is the government's ultimate aim. In the future the patient and general practitioner will sit down together and arrange an appointment for an exact date and time to suit the patient. This will require a large investment in information technology for both general practice and hospitals. Whether it will reduce non-attendance rates remains to be seen. Meanwhile, overbooking is a temporary solution that can be implemented immediately without major expenditure.

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